Investigating the Impact of Poverty and the Role of Human Capital on Economic Growth

Refina Sawitri¹, Heni Purwantini², Siti Mutmainah³ ^{1,2,3}STIE Jaya Negara Tamansiswa Malang,Indonesia

Abstract

This study aims to investigate the effect of health, education and poverty on economic growth in Malaysia. We use autoregression moving average to see the magnitude of the effect of health, education and poverty in Malaysia. This research period starts from 1990 to 2020 using secondary data from the world bank. we found that in Malaysia, technological developments are the biggest in providing a boost to the economy in Malaysia. Education and health provide a significant boost to economic growth so that they are three vital factors in economic growth in Malaysia. Poverty puts pressure on economic growth in Malaysia so that poverty must be reduced gradually to provide a boost to the economy in Malaysia.

Keywords: Education, Poverty, Economic Growth **JEL Classification :** A11, C23,J24

Received: May 6,2022 Accepted: June 1,2022 DOI : 10.54204/TAJI/Vol612022001

Background

Poor learning has a direct effect on lives and incomes and has an effect on future economic productivity, especially when turning economic strategies into executive programs (Adom, Amuakwa-Mensah, Agradi, & Nsabimana, 2021). Fighting poverty through education and obtaining certificates is one of the methods of fighting poverty permanently, but learning is more capable of building people's wealth dynamically, as it contributes to building people's wealth by itself and in various ways (Widarni & Bawono, 2022).

Society creates knowledge automatically, especially when there are economic and social policies marked by deep economic reforms, legislation, eradication of corruption, and empowerment of competence through education (Adam & Fazekas, 2021). In the modern era, the teacher's role is as a facilitator of the learning process rather than providing content to students, meaning that students receive training and support for learning (Sjølie, Strømme, & Boks-Vlemmix, 2021). In the modern era, the education system in the world does not provide basic skills (Biletska, Paladieva, Avchinnikova, & Kazak, 2021).

The Covid-19 crisis reveals the extent to which advanced technical systems and communication infrastructure are able to accommodate students living in their homes to continue studying and communicating with teachers (Singh, Steele, & Singh, 2021). Technology plays an important role in improving people's abilities. This requires policymakers to invest in improving and developing human capital (Indrawati & Kuncoro, 2021). Emerging human resources is one of the most important issues that economic and social policymakers must constantly examine and verify (Sharma, Kamble, Mani, Sehrawat, Belhadi, & Sharma, 2021).

The economy of the future is closely related to human resources. The education system is one of the pillars of successful economic and social policies (Abu-Shawish, Romanowski, & Amatullah,

2021). Governments in charge of education should review the quality of curricula and implementation of learning instead of teaching by lessons (Zheng, 2021), in addition to the need to rebuild feelings of joy and commitment among students and workers in Education (Psencik, 2022). Education requires systems that create a generation capable of learning and creating knowledge, especially since future jobs are formed in areas of higher-order thinking and advanced skills and the production of solutions instead of consuming them (Kuleto, Ilić, Dumangiu, Ranković, Martins, Păun, & Mihoreanu, 2021).

Poverty is the root of problems in the world of education and the economy (Zaman & Wang, 2021). In a poor society, children do not have the opportunity to get an education, because their parents do not have resources to buy basic necessities such as books, school uniforms for their children, or knowledge to care for them, forcing children to fall behind in school (Parsons, 2022). If they succeed in one way or another in completing some stage of the study, many of them end up leaving school at an early age, so that they can work, support their families and help them with life responsibilities, and in many cases, they do not return to school, which leaves them with no reading and writing skills, and other basic skills they need to continue their careers (Hagedorn, Wattick, & Olfert, 2022). Based on this unfortunate picture, their future children will continue to revolve in the same circle, with little income and limited options, ending up as their parents by dropping out of school and working (Huerta, 2022).

Poverty affects the interrelated formation and upbringing of children which in turn affects their academic and economic achievement, including students' healthcare and well-being, reading skills, language acquisition, accessibility to financial and physical resources, and mobility (Upadhyaya, Blocker, Houston, & Sims, 2021). All of these factors are interrelated, and one factor can exacerbate the effects of another (Malik, Patel, Pinto, Jaiswal, Tirupathi, Pillai, & Patel, 2022). For example, unsafe housing can predispose children to illness and inadequate medical care and malnutrition can lead to premature birth and low birth weight, all of which This in turn affect the physical and mental development of children (Napoli, Nioi, & Fossarello, 2021). In most developing and poor countries, the public education sector suffers from a severe shortage of teachers, especially qualified ones, and as a result, public schools fail (Shaturaev, 2021).

Living in daily economic hardship negatively impacts students' mental health and sense of competence and shakes their self-confidence (Türkleş, Boğahan, Altundal, Yaman, & Yılmaz, 2021). Poor families frequently lack access to a healthy diet and occasionally may not have enough food at home (Mialki, House, Mathews, & Shelnutt, 2021), in addition to the lack of financial education and accumulated debt which forces the poor families to send their children to school without breakfast and without daily expenses to make ends meet them during long school hours (Green & Bylander, 2021). In addition to these problems, children who witness violence or experience domestic stress due to family financial difficulties may also face barriers that do not help them to learn, and of course, this condition is more likely to occur in low-income families than in rich families (Calvano, Engelke, Di Bella, Kindermann, Renneberg, & Winter, 2022).

We can accuse poverty as the main cause of food insecurity and malnutrition, early malnutrition harms children's physical and mental development, as well as non-cognitive qualities like drive and perseverance, and the reason is that children are hungry or in poor health. Poor nutrition and health will prevent the poor from attending school or at the very least have an impact on their performance (Asoni, Gilli, Gilli, & Sanandaji, 2022). There are many children in developing countries who suffer from severe malnutrition, cognitive delays, and poor concentration and motivation early in life (Araújo, Veloso, Souza, Azevedo, & Tarro, 2021).

Education has changed the structure of food security In low-income and poor countries, many of the poorest people depend on agriculture for their livelihoods. The solution is to make education a top priority (Kansiime, Tambo, Mugambi, Bundi, Kara, & Owuor, 2021). Marginalized persons are more likely to obtain and benefit from education later on when they have a better understanding of health and how to protect themselves and their children from sickness. On this basis, making some improvements in one area benefits many others (Yates & Dickinson, 2021). Education increases profits in agricultural work, and education can provide these people with a path to better and more prosperous lives because elementary education's influence on agriculture output can be large and make a promising contribution to reducing food security and poverty problems in a sustainable manner (Liu, Li, Zhang, Ngo, & Iqbal, 2021). Because learned fundamental skills like reading, writing, and math have a demonstrable beneficial influence on the wages of marginalized communities, increased access to education can help reduce poverty and contributing significantly to increased rates of economic growth (Goudeau, Sanrey, Stanczak, Manstead, & Darnon, 2021). Education is very important to get out of chronic poverty and prevent its transmission between generations (Bashir, Ashraf, & Naveed, 2021). This study aims to investigate the effect of health, education and poverty on economic growth in Malaysia.

Research Method

We use autoregression moving average to see the magnitude of the effect of health, education and poverty in Malaysia. This research period starts from 1990 to 2020 using secondary data from the world bank. with the following equation

 $GDP_t = \beta_1 Ed_{t1} + \beta_2 Td_{t2} + \beta_3 Hd_{t3} + \beta_4 Pg_{t4} + e$

Where GDP = Economic Growth base on GDP growth Ed = Education development Td = Technology development Hd = Health development Pg = Poverty growth

Results and Discussion

The results of the equations from our estimates are presented in table 1.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Td	11.7231	0.9342	12.3211	0.2421
Pg	-4.2021	0.2347	-6.0231	0.0711
Hd	2.3214	0.2212	2.7228	0.3211
Ed	7.1223	0.2212	8.1127	0.0611
С	2.0078	0.5421	3.2101	0.0611
R-squared	0.990849			
Adjusted R-squared	0.986274			

Table 1. Estimation Results

Based on the estimation results, technology has the greatest influence compared to proverty growth, health development, education growth. Technology development contributes 11.7% of every percent of technological advancements to economic growth. However, poverty has a negative influence of 4.2% of every increase in the unemployment rate in Malaysia. Education has a 7.1% impact on driving economic growth, and health provides a 2.3% boost for every percent increase in health development in Malaysia.

Conclusion

In Malaysia, technological developments are the biggest in providing a boost to the economy in Malaysia. Education and health provide a significant boost to economic growth so that they are three vital factors in economic growth in Malaysia. Poverty puts pressure on economic growth in Malaysia so that poverty must be reduced gradually to provide a boost to the economy in Malaysia.

References

- Abu-Shawish, R. K., Romanowski, M. H., & Amatullah, T. (2021). Policy borrowing and developing knowledge economies in GCC countries: A critique from a Human Capital Theory perspective. Asia Pacific Education Review, 22(1), 77-88.
- Adam, I., & Fazekas, M. (2021). Are emerging technologies helping win the fight against corruption? A review of the state of evidence. Information Economics and Policy, 57(1), 1-14.https://doi.org/10.1016/j.infoecopol.2021.100950
- Adom, P. K., Amuakwa-Mensah, F., Agradi, M. P., & Nsabimana, A. (2021). Energy poverty, development outcomes, and transition to green energy. Renewable Energy, 178(1), 1337-1352.
- Araújo, L. A. D., Veloso, C. F., Souza, M. D. C., Azevedo, J. M. C. D., & Tarro, G. (2021). The potential impact of the COVID-19 pandemic on child growth and development: a systematic review. Jornal de pediatria, 97(1), 369-377.
- Asoni, A., Gilli, A., Gilli, M., & Sanandaji, T. (2022). A mercenary army of the poor? Technological change and the demographic composition of the post-9/11 US military. Journal of Strategic Studies, 45(4), 568-614.
- Bashir, F., Ashraf, M., & Naveed, T. (2021). Determinants of Intergenerational Transmission of Poverty in Pakistan: A Case Study. Review of Economics and Development Studies, 7(1), 91-99.
- Biletska, I. O., Paladieva, A. F., Avchinnikova, H. D., & Kazak, Y. Y. (2021). The use of modern technologies by foreign language teachers: developing digital skills. Linguistics and Culture Review, 5(2), 16-27.
- Calvano, C., Engelke, L., Di Bella, J., Kindermann, J., Renneberg, B., & Winter, S. M. (2022). Families in the COVID-19 pandemic: parental stress, parent mental health and the occurrence of adverse childhood experiences—results of a representative survey in Germany. European child & adolescent psychiatry, 31(7), 1-13.
- Green, W. N., & Bylander, M. (2021). The exclusionary power of microfinance: Overindebtedness and land dispossession in Cambodia. Sociology of Development, 7(2), 202-229.
- Goudeau, S., Sanrey, C., Stanczak, A., Manstead, A., & Darnon, C. (2021). Why lockdown and distance learning during the COVID-19 pandemic are likely to increase the social class achievement gap. Nature Human Behaviour, 5(10), 1273-1281.

- Hagedorn, R. L., Wattick, R. A., & Olfert, M. D. (2022). "My entire world stopped": college students' psychosocial and academic frustrations during the COVID-19 pandemic. Applied Research in Quality of Life, 17(2), 1069-1090.
- Huerta, A. H. (2022). Accessing possible selves with limited college knowledge: Case studies of Latino boys in two urban continuation schools. American Behavioral Scientist, 66(10), 1342-1367.
- Indrawati, S. M., & Kuncoro, A. (2021). Improving competitiveness through vocational and higher education: Indonesia's vision for human capital development in 2019–2024. Bulletin of Indonesian Economic Studies, 57(1), 29-59.
- Kansiime, M. K., Tambo, J. A., Mugambi, I., Bundi, M., Kara, A., & Owuor, C. (2021). COVID-19 implications on household income and food security in Kenya and Uganda: Findings from a rapid assessment. World development, 137,1-10.
- Kuleto, V., Ilić, M., Dumangiu, M., Ranković, M., Martins, O. M., Păun, D., & Mihoreanu, L. (2021). Exploring opportunities and challenges of artificial intelligence and machine learning in higher education institutions. Sustainability, 13(18), 1-10.
- Liu, F., Li, L., Zhang, Y., Ngo, Q. T., & Iqbal, W. (2021). Role of education in poverty reduction: macroeconomic and social determinants form developing economies. Environmental Science and Pollution Research, 28(44), 63163-63177.
- Malik, P., Patel, K., Pinto, C., Jaiswal, R., Tirupathi, R., Pillai, S., & Patel, U. (2022). Post-acute COVID-19 syndrome (PCS) and health-related quality of life (HRQoL)—A systematic review and meta-analysis. Journal of medical virology, 94(1), 253-262.
- Mialki, K., House, L. A., Mathews, A. E., & Shelnutt, K. P. (2021). Covid-19 and college students: Food security status before and after the onset of a pandemic. Nutrients, 13(2), 1-10.
- Napoli, P. E., Nioi, M., & Fossarello, M. (2021). The "Quarantine Dry Eye": the lockdown for coronavirus disease 2019 and its implications for ocular surface health. Risk Management and Healthcare Policy, 14(1), 1-10.
- Parsons, R. (2022). Moving Out to Move Up: Higher Education as a Mobility Pathway in the Rural South. RSF: The Russell Sage Foundation Journal of the Social Sciences, 8(3), 208-229.
- Psencik, K. (2022). Principals rediscover their joy and purpose through coaching. The Learning Professional, 43(2), 56-60.
- Sharma, M., Kamble, S., Mani, V., Sehrawat, R., Belhadi, A., & Sharma, V. (2021). Industry 4.0 adoption for sustainability in multi-tier manufacturing supply chain in emerging economies. Journal of cleaner production, 281(1), 1-12.
- Shaturaev, J. (2021). 2045: Path to nation's golden age (Indonesia Policies and Management of Education). Science and Education, 2(12), 866-875.
- Singh, J., Steele, K., & Singh, L. (2021). Combining the best of online and face-to-face learning: Hybrid and blended learning approach for COVID-19, post vaccine, & post-pandemic world. Journal of Educational Technology Systems, 50(2), 140-171.
- Sjølie, E., Strømme, A., & Boks-Vlemmix, J. (2021). Team-skills training and real-time facilitation as a means for developing student teachers' learning of collaboration. Teaching and Teacher Education, 107(1), 1-10.
- Türkleş, S., Boğahan, M., Altundal, H., Yaman, Z., & Yılmaz, M. (2021). Diaries of nursing students during the covid-19 pandemic: A qualitative descriptive study. International Journal of Environmental Research and Public Health, 18(16), 1-10.

- Upadhyaya, S., Blocker, C. P., Houston, H. R., & Sims, M. R. (2021). Evolving two-generation services to disrupt the intergenerational effects of poverty and promote family well-being. Journal of Business Research, 125(1), 324-335.
- Widarni, E. L., & Bawono, S. (2022). Technology Investment, Consumption, and Economic Growth in Poverty Eradication Efforts in Indonesia. In Modeling Economic Growth in Contemporary Indonesia (pp. 217-223). Emerald Publishing Limited.
- Yates, S., & Dickinson, H. (2021). Navigating complexity in a global pandemic: The effects of COVID-19 on children and young people with disability and their families in Australia. Public Administration Review, 81(6), 1192-1196.
- Zaman, S., & Wang, Z. (2021). Exploring the relationship between remittances received, education expenditures, energy use, income, poverty, and economic growth: fresh empirical evidence in the context of selected remittances receiving countries. Environmental Science and Pollution Research, 28(14), 17865-17877.
- Zheng, S. (2021). Process drama in Chinese education: Possibilities and challenges in governmental policy papers and the curriculum of moral education. Applied Theatre Research, 9(2), 155-172.